Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Bill Barrett Corporation
Well Name/Number: Simmes Ranch 41-11-36-3W-H
Location: NE NE Section 11 T36N R3W
County: Toole **, MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time: No, 10-20 days drilling time.
Unusually deep drilling (high horsepower rig): Yes, single or double derrick drilling rig, 600-900 HP to drill a vertical pilot hole to 4071' into the Duperow Formation. Well will be logged and plugged back to 2300' and kickoff and drill a single lateral horizontal Banff Sand Formation well test, 3051'TVD/7360' MD.
Possible H2S gas production: Yes possible from Mississippian and Duperow Formations .
In/near Class I air quality area: No, no class I air quality area in the area of review.
Air quality permit for flaring/venting (if productive): Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:_____

Comments: If there is an existing pipeline for gas in the area and gas can be gathered or if no gathering system nearby associated gas can be flared under Board Rule 36.22.1220. Air quality permit required only if well is productive.

Water Quality

(possible concerns)
Salt/oil based mud: No, freshwater, and freshwater mud system to be used only.
High water table: No high water table at this location.
Surface drainage leads to live water: No, closest drainage is an unnamed ephemeral , about 3/8 of a mile to the east from this location.
Water well contamination: None, closest water well is about ¾ of a mile to the southeast from this location and is a stock water well, depth of 686'.
Porous/permeable soils: No, silty sandy bentonitic soils.
Class I stream drainage: No, Class I stream drainages, nearby.

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other: _____

Comments: 500' of surface casing will be set, well below freshwater zones in nearby water wells. Adequate surface casing and BOP equipment will be set and used. Pit liner will be used in the reserve pit.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings: No stream crossings required.
High erosion potential : No, small cut, up to 5.4' and small fill of 1.8', required.

Loss of soil productivity: None, location to be restored after drilling well, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite: No, large well site 550'X420'
Damage to improvements: Slight, surface use is cultivated grassland..
Conflict with existing land use/values: Slight.

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
X Stockpile topsoil
__ Stream Crossing Permit (other agency review)
X Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
X Other Requires DEQ General Permit for Storm Water Discharge Associated with Construction Activity, under ARM 17.30.1102(28).

Comments: Access will be from existing county gravel road, Loop Road. From existing Loop Road, about 100' of new access will be built into this new location. Reserve pit will be lined with a minimum 12 mill liner. Drilling fluids will be freshwater and freshwater mud system. Fluids will be allowed to dry in the reserve pit. Cuttings and pit solids will buried in the lined pit. Pit will then be backfilled with subsoil and final cover will be topsoil.

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences: Closest residences are about 1 ¼ of a mile to the southeast and 1 3/8 of a mile to the west northwest from this location. The landing strip is about 1 3/8 of a mile to the southeast of this location. The town of Sunburst, Montana is about 1.875 miles to the southeast from this location.
Possibility of H2S: Possible H2S from Mississippian and Duperow Formations.
Size of rig/length of drilling time: Single or double derrick drilling rig 10 to 20 days drilling time.

Mitigation:
X Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____
Comments: Adequate surface casing cemented to surface with working BOP stack should mitigate any problems. (BOP's 3,000 psig annular, pipe and blind rams) rule 36.22.1014.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified): None identified.
Proximity to recreation sites: None identified
Creation of new access to wildlife habitat: No
Conflict with game range/refuge management: No
Threatened or endangered Species: Threatened or endangered species is the Black-footed Ferret. Candidate species is the Sprague's Pipit. NH Tracker website list the following as species of concern: Hoary Bat, Baird's Sparrow, Golden Eagle, Ferruginous Hawk, Chestnut Collared Longspur and Long-billed Curlew.

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)

__ Screening/fencing of pits, drillsite
__ Other:_____
Comments: Private surface cultivated lands. There maybe species of concern that maybe impacted by this wellsite. We ask the operator to consult with the surface owner as to what he would like done, if a species of concern are discovered at this location.

Historical/Cultural/Paleontological

(possible concerns)
Proximity to known sites None identified
Mitigation
__ avoidance (topographic tolerance, location exception)
__ other agency review (SHPO, DSL, federal agencies)
__ Other:_____
Comments: Private surface cultivated lands. There maybe possible historical/cultural/paleontological sites that maybe impacted by this wellsite. We ask the operator to consult with the surface owner as to his desires to preserve these sites or not, if they are found during construction of the wellsite.

Social/Economic

(possible concerns)
__ Substantial effect on tax base
__ Create demand for new governmental services
__ Population increase or relocation
Comments: No concerns at this time. Well is a wildcat.

Remarks or Special Concerns for this site

The well will be drilled first as vertical pilot hole to 4071' into the Duperow Formation. Well will be logged and plugged back to 2300' and kickoff and drill a single lateral horizontal Banff Sand Formation well test, 3051'TVD/7360' MD.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): /s/Steven Sasaki
(title:) Chief Field Inspector
Date: July 19, 2012
Other Persons Contacted:

_____
Montana Bureau of Mines and Geology, Groundwater Information Center website
_____
(Name and Agency)
Toole County water wells
(subject discussed)
July 19, 2012

(date)

US Fish and Wildlife, Region 6 website
(Name and Agency)
ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES MONTANA COUNTIES, Toole County
(subject discussed)
July 19, 2012
(date)

Montana Natural Heritage Program Website
(Name and Agency)
Heritage State Rank= S1, S2, S3 T37N R3W
(subject discussed)

July 19, 2012 _____
(date)

If location was inspected before permit approval:
Inspection date: _ _____
Inspector: _____
Others present during inspection: ___ _____